

## WHAT IS CLAIMED IS

1. A waveform generator, comprising:

a source of a periodic input correction signal;

5 a capacitor;

a first semiconductor switch coupled to said capacitor and responsive to a signal at a first reference level for developing a direct current voltage in said capacitor that level shifts said periodic, input correction signal by an amount determined in accordance with said first reference level;

10 a source of a periodic switch control signal; and

a second semiconductor switch responsive to said level shifted periodic input correction signal and to said periodic switch control signal for generating a periodic output dynamic correction signal having a frequency related to a deflection frequency and a waveform portion, controlled by an operation of said second semiconductor switch, said waveform portion occurring, during a corresponding portion of a period of said output dynamic correction signal, said dynamic correction signal being coupled to a cathode ray tube to vary a field in a beam path of an electron beam of said cathode ray tube for providing dynamic correction.

20 2. The waveform generator according to Claim 1, wherein said first semiconductor switch establishes a peak level of said dynamic output correction signal at a level determined in accordance with said first reference level.

25 3. The waveform generator according to Claim 2, wherein said waveform portion of said dynamic output correction signal occurs between an end of a trace portion and a beginning of an immediately following trace portion of said dynamic output correction signal.

30 4. The waveform generator according to Claim 1, wherein said second semiconductor switch removes from said dynamic correction signal a parasitic portion of said periodic input correction signal that occurs during retrace.

5. The waveform generator according to Claim 1, wherein said first semiconductor switch clamps a peak level of said dynamic output correction signal that occurs at an end of trace to a constant level, in accordance with said first reference level.

5           6. The waveform generator according to Claim 5, wherein a peak-to-peak amplitude of said dynamic output correction signal is selectable and wherein said end of trace portion of said dynamic correction signal is clamped to said constant level that is the same for different selections of said peak-to-peak amplitude.

10           7. The waveform generator according to Claim 1, wherein said dynamic output correction signal varies in a parabolic manner, during trace.

            8. The waveform generator according to Claim 1, wherein said first semiconductor switch excludes a transistor.

15           9. The waveform generator according to Claim 1, wherein said first semiconductor switch comprises a peak rectifier and said second semiconductor switch comprises a transistor responsive to a retrace interval indicative signal.

20           10. A waveform generator for providing dynamic correction, comprising:  
            a capacitor;  
            a source of a periodic input signal at a frequency related to a deflection frequency coupled to a first terminal of said capacitor;  
            a first semiconductor switch responsive to a signal at a first reference level and  
25           coupled to a second terminal of said capacitor for periodically clamping a peak level of a signal developed at said second terminal;  
            a source of a periodic switch control signal; and  
            a second semiconductor switch responsive to a signal at a second reference level and to said periodic switch control signal for periodically clamping said signal  
30           developed at said second terminal, in accordance with said second reference level, said signal developed at said second terminal being coupled to a cathode ray tube to vary a field in a beam path of an electron beam of said cathode ray tube for providing dynamic correction.

11. The waveform generator according to Claim 10, wherein said second semiconductor switch removes from said signal developed at said second terminal a parasitic portion of said periodic input signal that occurs during retrace.

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12. A waveform generator, comprising:

a source of a periodic input correction signal;

a capacitor;

10 a first semiconductor switch coupled to said capacitor and responsive to a signal at a reference level for developing a direct current voltage in said capacitor that level shifts said periodic, input correction signal by an amount determined in accordance with said first reference level;

an amplifier having an input responsive to said level shifted input correction signal for applying said level shifted input correction signal to an output of said amplifier;

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a source of a periodic switch control signal; and

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a second semiconductor switch responsive to said periodic switch control signal and to said level shifted input correction signal and coupled to said output of said amplifier that isolates said second semiconductor switch from said capacitor for generating a periodic output dynamic correction signal having a first portion, during a first portion of a period of said input correction signal, that is controlled in accordance with said periodic input correction signal, and a second portion, during a second portion of said period of said input correction signal, that is controlled, in accordance with an operation of said second semiconductor switch, said dynamic correction signal being coupled to a cathode ray tube to vary a field in a beam path of an electron beam of said cathode ray tube for providing  
25 dynamic correction.